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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,911	11/01/2001	James Bennington Stopher	16,206	7743

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EXAMINER

BRYANT, DAVID P

ART UNIT PAPER NUMBER

3726

DATE MAILED: 01/30/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/003,911

Applicant(s)

STOPHER ET AL.

Examiner

David P. Bryant

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 11-13, 15-17, 19, 20, 22, 23 and 25-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 11-13, 15-17, 19, 20, 22, 23 and 25-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 11-13, 15-17, 19, 20, 22, 23, and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer (EP 0 812 789 A2) in view of Blumenthal et al. (U.S. Patent No. 6,450,321).

Claims 1, 8, and 11-13: In Figure 1 of Meyer, note the apparatus for applying discrete components **1** onto a moving substrate **8**, and for changing a speed of discrete components in use, the apparatus including:

- a first rotatable drive member **37**;
- at least a second rotatable drive member **34** which is substantially coaxial with said first drive member **37**;
- a first servo motor **M** connected to rotate said first drive member **37**;
- at least a second servo motor **M** connected to rotate said second drive member **34**;
- a first transfer puck **2A** driven by said first rotatable drive member **37**;
- at least a second transfer puck **1A** driven by said second rotatable drive member **34**;

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a first electronic drive **46** connected to said first servo motor **M**, said first electronic drive configured (via programmable control **45**) to selectively move said first transfer puck **2A** at a first, pickup speed and at least a second, deposit speed; and

at least a second electronic drive **47** connected to said second servo motor **M**, said second electronic drive configured (via programmable control **45**) to selectively move said second transfer puck **1A** at said first pickup speed and at said second deposit speed.

Therefore, Meyer teaches all claimed elements, with the exceptions of the particular capabilities of the servo motors (i.e. a torque of at least 50 Newton-meter and an angular acceleration of at least 600 radian/sec<sup>2</sup>) and the parameters of the deposit/pickup speeds (i.e. the dwell times and speed ratios).

The servo motor capabilities and the operating parameters of the apparatus are considered to have been obvious matters of choice, since it has been held that where the general conditions of a claim are disclosed by the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Furthermore, Blumenthal et al., in the disclosure from column 8 (line 30) to column 11 (line 67), go into great detail about the capabilities of servomotors **60** (see Figure 4) used for varying the speed of discrete articles as they are applied onto a moving substrate, in addition to the variable parameters used to program the servomotors. To utilize at least some of the teachings of Blumenthal et al. to program the programmable controller of Meyer would have been obvious to one having ordinary skill in the art. Also, Blumenthal et al. explicitly disclose (in column 11, lines 6-17) that for manufacturing articles such as disposable diapers (precisely one of the uses for applicant's disclosed apparatus), "the peak torque requirements of the apparatus combined with the resulting acceleration at the

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motor[s] will require very high torque to inertia properties in the motor[s].” Clearly, based on this disclosure, one of ordinary skill in the art would have found it obvious to provide the servo motors of Meyer with a torque capability of at least about 50 Newton-meter, which would yield a corresponding angular acceleration rate of at least about 600 radian/sec<sup>2</sup>.

Claim 2: Note transport mechanism 4.

Claim 3: As clearly disclosed, the transfer pucks are configured to carry respective discrete components 1.

Claim 4: Figure 1 shows the first and second drive members 37 and 34 as being substantially concentric.

Claim 5: As shown in Figure 1, each transfer puck is operatively connected to its respective drive member via a radially extending arm.

Claims 6 and 7: See column 5, lines 13-35.

Claims 15 and 16: See column 4, lines 47-51.

Claim 17: Meyer teaches all claimed elements, with the exceptions of a third set of a drive member, servo motor, transfer puck, and electronic drive. However, the provision of a third set is deemed to have been an obvious matter of choice, since it has been held that a mere duplication of parts is of no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). Furthermore, Blumenthal et al. teach, in column 5 (lines 53-63), that any number of rotatable drive members/transfer pucks/servomotors may be provided in such an apparatus to provide a desired speed ratio differential. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have

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provided a third set of such components in the apparatus of Meyer, as taught by Blumenthal et al., to provide a desired speed ratio differential.

Claims 19 and 20: Each of independent method claims 19 and 20 correspond directly to the structure set forth above in the explanation of the rejection of claim 1. No further explanation is deemed necessary.

Claims 22 and 23: These claims are rejected for the same reasons set forth above with respect to claims 1 and 13. No further explanation is deemed necessary.

Claims 25 and 28: See column 5, lines 13-35.

Claims 26 and 27: These claims are rejected for the same reasons set forth above with respect to claim 17. No further explanation is deemed necessary.

### ***Response to Arguments***

Applicant's arguments filed 12/11/03 have been fully considered but they are not persuasive.

Applicant argues that neither Meyer nor Blumenthal et al. teach, *inter alia* a first servo motor that can provide a torque of at least about 50 Newton-meter, a second servo motor that can provide a torque of at least about 50 Newton-meter, and electronic drives connected to the servo motors so that the servo motors and drives can cooperatively provide an angular acceleration rate of at least about 600 radian/sec<sup>2</sup> to the first and second transfer puck. The examiner agrees. Further, it is noted that neither Meyer nor Blumenthal et al. teach any specific torques or angular acceleration rates throughout their disclosures. This lends credence to the examiner's contention (based further on *In re Aller*) that the programming of the servo motors to provide the

particularly claimed values of torque and angular acceleration rate would involve only routine skill in the art; i.e. Meyer and Blumenthal et al. understood this to be the case, thus obviating the requirement to go into specific detail about the optimum torques or angular acceleration rates. Blumenthal et al. even go so far as to outline numerous formulae to determine the servo motor torque and angular accelerations for the apparatus. Surely, one of ordinary skill in the art would find it obvious to determine the optimum values based on those formulae. To further support the contention that it would have been obvious to provide servo motors capable of the specifically claimed torque and acceleration rate, applicant's attention is directed to the disclosure of Blumenthal et al. at column 11, lines 6-17, which is discussed specifically in the above rejection of claim 1.

Applicant further argues that Meyer teaches away from providing servo motors capable of high levels of torque, since it is disclosed at column 10, lines 40-44, how levels of torque can be reduced to more reasonable levels. However, that disclosure of Meyer does not explicitly point out what torque levels would be considered "more reasonable" and thus cannot be relied upon to exclude servo motors that are capable of producing a torque of at least 50 Nm. Therefore, Meyer does *not* teach away from the present invention.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Telephone inquiries regarding the status of this application, or other general questions, by persons entitled to the information, should be directed to the group clerical personnel. In as much as the official records and applications are located in the clerical section of the examining groups, the clerical personnel can readily provide status information. M.P.E.P. 203.08. The Group clerical receptionist number is (703) 308-1148.

If in receiving this Office Action it is apparent to applicant that certain documents are missing, e.g., copies of references cited, form PTO-1449, form PTO-892, etc., requests for copies of such papers or other general questions should be directed to Tech Center 3700 Customer Service at (703) 306-5648, or fax (703) 872-9301 or by email to [CustomerService3700@uspto.gov](mailto:CustomerService3700@uspto.gov).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **David Bryant** whose telephone number is **(703) 308-1859**. Draft amendments or proposed changes to the application may be faxed directly to the examiner at any time via RightFAX at (703) 746-4213 (formal inquiries or responses should NEVER be faxed to this number). The examiner can normally be reached on **Mondays-Thursdays from 6:30 AM to 5:00 PM**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The official fax phone number for the organization where this application or proceeding is 703-872-9306 for all communications (including After Final communications).

Other helpful telephone numbers are listed for applicant's benefit.

Allowed Files & Publication	(703) 308-6789 or (888) 786-0101
Assignment Branch	(703) 308-9723
Certificates of Correction	(703) 305-8309



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Art Unit 3726